



## November 2014 News from the International Biochar Initiative

### IBI has a Senior Level Position Open

IBI is seeking a mission-focused and entrepreneurial Executive Director to lead IBI to the next level of financial, programmatic, and organizational success. This is an excellent position for a collaborative leader with demonstrated experience in fundraising and growing an organization, and the drive, tenacity, and independence to thrive in and lead a young and evolving international nonprofit. CEA Recruiting is assisting us with this search. The full position description as well as instructions for application can be found directly on [CEA's website](#). If someone you know is interested in this leadership opportunity or if you have names or organizations you could suggest for additional outreach, please contact Savanna Ferguson at [savanna@ceaconsulting.com](mailto:savanna@ceaconsulting.com).

### Comparison of *IBI Biochar Standards* and *European Biochar Certificate*

IBI recently collaborated with the European Biochar Foundation to publish an updated comparison of the *IBI Biochar Standards* with its analog, the *European Biochar Certificate (EBC)*. Interested stakeholders are now able to easily review the similarities and differences between the analytical testing and other requirements in both documents. IBI recently published Version 2.0 of the *IBI Biochar Standards*—approved by a large majority through a vote by IBI dues-paying members—which includes some revisions that harmonize the IBI and EBC programs; for example, the test methods and criteria for the determination of polycyclic aromatic hydrocarbons (PAHs) in biochars. [Please click here to review the IBI-EBC comparison](#).

### December IBI Webinar Series Event: Art Donnelly of Seachar Presents, “Estufa Finca Project: Biochar cook-stoves as a development tool”

Many of you ask for real-world perspective on how to start making biochar and how you can use it to help build a biochar industry. For our December webinar event, IBI welcomes Estufa Finca Project Director and co-founder of Seachar (Seattle Biochar Working Group), Art Donnelly, to share his perspective on this—and more!



Mr. Donnelly will give a presentation titled, *The Estufa Finca Project: Biochar cook-stoves as a development tool*. This presentation will give a brief introduction to the Estufa Finca project's 5-year history in Costa Rica, introducing biochar producing cook-stoves and participating in university-led biochar field trials. He will highlight the stove technology, the quantity and quality of biochar produced, the field trial results, and the biochar market-building work. After the presentation, Mr. Donnelly will lead a Q&A session and discuss paths forward in terms of scaling up this approach of utilizing a biochar technology cluster as a carbon negative development strategy.

[Registration is open now](#). The webinar will be held on **Thursday, December 11th at 12:00 pm** Eastern Time. Note: Please convert the 12:00 pm ET start time to your local time by using this [time converter tool](#).

**You must be a dues-paying member to participate in these special events.** If you are not an IBI member and would like to join, [please click here](#). A recording of the webinar will be available afterward, in the member's-only area of our website.

For more information on this webinar program, including links to prior presentations by Dr. Steven McGreevy (Research Institute for Humanity and Nature, Kyoto, Japan), Dr. Johannes Lehmann (Cornell University, USA), and Dr. Isabel Lima (US Department of Agriculture) please see: [http://www.biochar-international.org/webinar\\_series](http://www.biochar-international.org/webinar_series).

## **Profile: The *Kosñipata Biochar Project* in Peru: Using Biochar to Increase Agricultural Sustainability in a Diverse Ecosystem**

Peru's Kosñipata Valley is a biodiversity-rich region of the Peruvian Amazon, adjacent to the Manu Biosphere Reserve in the Southeastern part of the country. The area has been dominated by agriculture—mainly using slash and burn to convert forest land to agricultural land. This agricultural practice, along with legal and illegal mining in the area, has left many of the soils drained of nutrients and potentially contaminated with heavy metals. To investigate the potential of biochar to increase soil health in the area, researchers from Wake Forest University in the United States are partnering with the Asociación por la Conservación de la Cuenca Amazónica (Amazon Conservation Association) at a local field station—converting two abandoned pastures into field demonstration projects using biochar. The project team, based at Villa Carmen Biological Research Station, is led by biology professor Miles Silman and managed on the ground by graduate student Andrew Wilcox, both of Wake Forest University.



In addition to improved soils, a project aim is implementation of agroforestry principles in the sustainable management of native Amazonian bamboos. The main biochar feedstock is native bamboos (from the genus *Guadua*) as well as other local feedstocks. Although the project is focusing first on using bamboo due to the prevalence of the material, the area is so diverse with plant species (some of them invasive) that the team has access to many different feedstocks for biochar production.

To read the remainder of this story, please see: [http://www.biochar-international.org/profile\\_Peru\\_Kosnipata](http://www.biochar-international.org/profile_Peru_Kosnipata)

Photo courtesy of *Kosñipata Biochar Project*.

## **Biochar Briefs: News Roundup for November**

We update the website weekly with new articles on biochar. For more information, please see: <http://www.biochar-international.org/newsbriefs>.

### **United Arab Emirates (UAE)**

[The UAE has approximately 40 million palm trees](#); 75% of them grow in Abu Dhabi. Although the trees are beautiful, each palm produces about 15 kilograms of waste fronds annually. Instead of sending this biomass to landfills, researchers led by Dr. Lina Yousef at the Masdar Institute of Science and Technology in Abu Dhabi are turning it into biochar. The team has yet to publish their findings, but initial

trials showed palm frond biochar allowed soils to hold up to 40% more water. According to Nahid Khalifa, a student in Dr. Yousef's group, "[Increases in water retention are] crucial in this region, as it is dry for long periods throughout the year."

### **United Kingdom**

[James Spratt, an electrician by trade in Somerset, England](#), recently started a biochar and charcoal company called Black Fox Woodland Products, which produces biochar and charcoal using an Exeter Retort. He uses coppiced hazel from an 80-acre forest and plans to cut about an acre a year for production. The biochar will be added to compost for a soil amendment and the charcoal is sold to London restaurants for cooking. The retort design won the Devon "Low Carbon Innovative Business" award in 2012.

### **United States**

[A veteran-owned business in Oregon is entering the biochar marketplace](#). After securing \$150,000 in commercialization funding from OregonBEST and the Portland Development Commission earlier this year, Walking Point Farms LLC, led by Mr. Howard Boyte, is partnering with Marion Ag Services to sell Pro-Pell-It. The product is a small pellet of lime coated with biochar. Working with Oregon State University professor and dryland cropping agronomist Stephen Machado, Walking Point Farms' biochar-treated pellets showed a yield increase in red winter wheat in soils where it was applied.

## **New Biochar Information Source: the Biochar Journal (tBj)**

Are you interested in the many facets of biochar? Take a look at the newly published Biochar Journal; which will release an in-depth biochar article every two weeks. These informational peer-reviewed articles will be on innovative topics around biochar. You can sign up for the Biochar Journal newsletter and get articles delivered to your inbox. Recent articles include: "Biochar in South Korea – experiences from every day" by Haiko Pieplow; "How Biochar Works in Soil" by Kelpie Wilson; and "Biochar Paper – elevating biochar from novelty to ubiquity" by Kathleen Draper. To read these recent publications, please see: <https://www.biochar-journal.org/en>. You can subscribe to tBj and further support their work at <http://www.biochar-journal.org/en/subscription>.

## **Opportunities in Biochar**

- Submit an abstract to the biochar session, "Future challenges in biochar research at European Geosciences Union (EGU) General Assembly" in Vienna, Austria. The abstract submission deadline is **January 7, 2015**. More information is available at: <http://www.biochar-international.org/node/5514>.
- Take advantage of a free subscription to Biomass Magazine. More information is available at: <http://www.biochar-international.org/node/5537>.
- Download a new open access biochar book: *Biochar Culture*, by Sai Bhaskar N Reddy. The text highlights the use of biochar in communities and its potential for increased sustainable agriculture in smaller scale farmsteads and homes, focusing on work in India. The book can be accessed at: <http://www.biocharculture.com>.
- Job postings in biochar (as well as research/educational opportunities) can be accessed at: <http://www.biochar-international.org/network/jobs>.
- Looking for potential grant funding? Check out the Terra Viva Grants Directory which develops and manages information about grants for agriculture, energy, environment, and natural resources in the world's developing countries at: <http://www.terravivagrants.org/Home>.

## **Upcoming Calendar Events**

- November 29: Biochar Training; full immersion. Location: Northern Rivers, NSW, Australia. For more information: <http://www.biochar-international.org/node/5674>

- December 10: International Perspectives on Biochar Research and Application. Location: NSW, Australia. For more information: <http://www.biochar-international.org/node/5538>
- February 25 – 26: 2015 Ecological Landscaping Association (ELA) Conference. Location: Springfield, MA, USA. For more information: <http://www.biochar-international.org/node/5518>
- March 7 – 14: George Mason University Permaculture Design Certification Course. Location: VA, USA. For more information: <http://www.biochar-international.org/node/5561>
- March 16 – 18: Climate Smart Agriculture 2015 Global Science Conference. Location: Le Corum, Montpellier, France. For more information: <http://www.biochar-international.org/node/5354>
- April 12 – 17: European Geosciences Union (EGU) General Assembly; Biochar Session: Future challenges in biochar research. Location: Vienna, Austria. For more information: <http://www.biochar-international.org/node/5513>
- April 16 – 21: 3rd International Biochar Training Course. Location: Nanjing, China. For more information: [http://www.biochar-international.org/China\\_training\\_2015](http://www.biochar-international.org/China_training_2015)
- April 20 – 22: International Biomass Conference and Expo. Location: Minneapolis, MN, USA. For more information: <http://www.biochar-international.org/node/5536>
- April 20 – 24: III International Symposium on Organic Matter Management and Compost Use in Horticulture. Location: Murcia, Spain. For more information: <http://www.biochar-international.org/node/5389>

See the [IBI Calendar page](#) for more events. To add an event to the calendar, send the information to [info@biochar-international.org](mailto:info@biochar-international.org).

## Regional Group Update

To read more on the 57 regional and national biochar groups, [please see IBI's website](#). This month's report is from the Universiti Kuala Lumpur Malaysian Institute of Chemical & Bioengineering Technology (MICET).

Two undergraduate students at MICET under the supervision of [Dr. Amelia Md Som](#) are investigating the effect of biochar on phytoremediation of soils contaminated with Copper, Nickel, Lead, and Zinc. MICET also welcomed two visiting students from Wismar University in Germany, Mr. Kevin Busack and Mr. Lukas Sievert, who are recipients of the [DAAD RISE Worldwide scholarship](#). Mr. Busack is developing a standard operating procedure for the ALL Power Lab's biochar experimenter kit (BEK) which is onsite, and then he is producing and characterizing biochar from oil palm biomass under various process conditions and will determine the emission factors for various gases. His project is being carried out in collaboration with the Malaysian Palm Oil Board (MPOB). Mr. Sievert is working to improve the up-scaled Belonio rice husk gasifier developed by Dr. Nsamba Hussein Kisiki for increased use efficiency as well as improved syngas utilization.

## Recently Published Biochar Research

IBI tracks all published research on biochar and includes it in our [online bibliography](#). The following articles were added in the last month. Please visit the website bibliography for more information on any of these articles. Due to copyright infringement laws, we cannot provide full copies of articles unless we have permission from the publisher. If you have published work that is not included, [please email us](#).

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